

ABSTRACT

Provided is a power generation cell for a solid electrolyte fuel cell, in which a lanthanum gallate-based electrolyte is used as a solid electrolyte. Use of alternative energy for replacing petroleum can be promoted and it is possible to use waste heat using the solid electrolyte fuel cell, thus the solid electrolyte fuel cell is watched in views of resource nursing and the environment.

10 The power generation cell is typically operated at 800 to 1000°C. However, currently, the power generation cell, which is operated at 600 to 800°C by using the lanthanum gallate-based electrolyte, is suggested. Since a current power generation cell has a large size and has an

15 insufficient output, there are demands for size reduction and high output. In the power generation cell, Sm-doped ceria particles are separately attached to a surface of porous nickel having a network frame structure. The demands are satisfied by using the anode.